

ABSTRACT

An economical, compact digital/analog wireless data telemetry system includes either an analog transceiver or a digital packet data (e.g. CDPD) unit coupled with a portable computing device to provide a Mobile Data messaging and location device. The wireless data telemetry system is well suited for use in many possible applications, one application, vehicle location, provides an exemplary embodiment. In broadest terms, the system utilizes a plurality of analog RF channels for transmitting Mobile Data Packet Protocol (MDPP) packets between a tower site controller or remote base and number of mobile data units. The radio links between the tower site and the mobile data units are full duplex analog RF data transmission links utilizing full duplex receivers and transmitters at each installation. The operation of the combination of elements is the novel focus of the present invention. Particularly, the mobile data unit includes a main unit comprising RF and data boards and connections for an external GPS receiver and an RF antenna for transmission of data telemetry packets to a base station. The base or dispatch station receives data in MDPP format from a plurality of mobile units and organizes that information into a database which can be readily stored and manipulated in a central web site server for access by users or customers.